



# MHI-MME Achieved 100 units of Retrofit Propeller Order - Contribute to GHG Reduction by Improving Fuel Efficiency

Tokyo, Japan, December 15, 2021 - Mitsubishi Heavy Industries Marine Machinery & Equipment Co., Ltd. (MHI-MME), has achieved order 100 units of the retrofit propeller, which began delivery since 2013.

MHI-MME began producing propellers for the first time in Japan on 1904, and has a long history of more than 100 years. MHI-MME has continued producing and developing high performance propellers on the basis of a proven track record, which now the production record is over 6,000 units.

The retrofit propeller is designed for slow steaming conditions by the limitation of engine load and MHI-MME shows the large effects for the improvement of fuel efficiency with applying the suitable design for slow steaming. The retrofit propeller efficiency improvement in a certain vessel reached about 8%, up to the limitation of engine load. Moreover, MHI-MME applies the design for the retrofit propeller to Mitsubishi Advanced Propellers (MAP) Mark-W, which propeller was launched in 2010 and can improve the propeller efficiency without sacrificing cavitation margin.

Many customers in Japan and overseas expect the benefits of retrofitting and have adopted our propellers for large containerships, LNG carriers and tankers, which are often applied in slow steaming. And orders for retrofit propellers have been increasing due to the need to comply with EEXI (Note1) regulations.

Additionally, MHI-MME carries out the evaluation of the propeller efficiency improvement after propeller retrofitting and confirmed.

Furthermore, when retrofitting a propeller, MHI-MME also proposes to buy the propeller currently installed on the customer's vessel, thereby offering an opportunity for customers to reduce their initial investment.

MHI-MME will continue to propose the retrofit propeller for the needs of slow steaming.

Note1: EEXI = Energy Efficiency Existing Ship Index

IMO has adopted mandatory regulation at 76th session of MEPC held in June 2021 to achieve 2030 CO<sub>2</sub> reduction targets for existing ships.

